

- a) reaction of a rapamycin having an activated coupling group with an immunogenic protein to produce an immunogenic conjugate;
- b) administration of said immunogenic conjugate to an appropriate animal species to effect immunogenic challenge and recovery of antibody-producing cells sensitized to said conjugate;
- c) immortalization of said antibody-producing cells; and
- d) recovery of monoclonal antibody from a selected immortalized cell line thus established.

19. (new) A monoclonal antibody of claim 15 wherein the rapamycin is (i) rapamycin; or (ii) a 40-O-alkylated rapamycin.

20. (new) A monoclonal antibody of claim 19 wherein the rapamycin is rapamycin.

21. (new) A monoclonal antibody of claim 19, wherein the 40-O-alkyl substituent is hydroxyalkyl, hydroxyalkoxyalkyl, acylaminoalkyl, or aminoalkyl..

22. (new) A monoclonal antibody of claim 21 wherein the rapamycin is

- i) 40-O-(2-hydroxyethyl)-rapamycin,
- ii) 40-O-(3-hydroxypropyl)-rapamycin,
- iii) 40-O-[2-(2-hydroxy)ethoxy]ethyl-rapamycin, or
- iv) 40-O-(2-acetaminoethyl)-rapamycin).

23. (new) A monoclonal antibody of claim 22, wherein the rapamycin is 40-O-(2-hydroxyethyl)-rapamycin.

24. (new) A monoclonal antibody of claim 15 which distinguishes between (i) rapamycin and (ii) a 40-O-alkylated rapamycin.

25. (new) A monoclonal antibody of claim 24 wherein the 40-O-alkyl substituent is hydroxyalkyl, hydroxyalkoxyalkyl, acylaminoalkyl, or aminoalkyl.

26. (new) A hybridoma cell line which produces a monoclonal antibody of claim 15.

27. (new) An immunoassay kit for measuring the blood level of a rapamycin, comprising a monoclonal antibody of claim 15.